

REMARKS

Claims 1-41 are pending in this application. By this Amendment, claims 1-3, 5, 6, 10-13, 15, 17-18, 24 and 28-29 are amended and new claims 30-41 are added. Various amendments are made to the claims for clarity and are unrelated to issues of patentability

The Office Action objects to claim 13 because of informalities and rejects claims 1-3, 5-7, 10-18, 24, 28 and 29 under 35 U.S.C. §112, second paragraph. It is respectfully submitted that the above amendments obviate the grounds for objection and rejection. For example, Applicants have specifically amended the claims based on the comments provided in the rejection. Withdrawal of the rejection is respectfully requested.

The Office Action rejects claims 1-7, 9, 11, 12, 14-18 and 20-27 under 35 U.S.C. §102(e) by U.S. Patent 6,526,215 to Hirai et al. (hereafter Hirai). The Office Action also rejects claims 28 and 29 under 35 U.S.C. §102(e) by U.S. Patent 5,956,026 to Ratakonda. Still further, the Office Action rejects claims 8, 10, 13 and 19 under 35 U.S.C. §103(a) over Hirai and Ratakonda. The rejections are respectfully traversed.

Independent claim 1 recites receiving a video stream from a first source and dividing the video stream into a plurality of sections. Independent claim 1 further recites selecting one of a key frame and a key region from each of the plurality of sections and combining the selected one of the key frame and the key region from each of the plurality of sections to form a synthetic key frame.

Hirai does not teach or suggest all the features of independent claim 1. That is, Hirai relates to editing a moving picture by dividing a moving picture into scenes and extracting a still

image representing each of the scenes and cuts. The user may thereby arrange the cuts in a hierarchical structure in accordance with the respective scenes. However, Hirai does not teach or suggest selecting one of a key frame and a key region from each of a plurality of sections and combining the selected one of the key frame and the key region from each of the plurality of scenes to form a synthetic key frame, as recited in independent claim 1. That is, Hirai has no suggestion for a synthetic key frame based on selected ones of the key frames and the key regions from each of the plurality of sections. At best, Hirai merely shows that the operator may organize M icons 302 into a hierarchical structure to thereby make a story. See column 9, lines 15-20. Hirai has not suggestion for combining selected key frames or key regions from each of a plurality of sections to form a synthetic key frame. As such, independent claim 1 defines patentable subject matter.

Each of independent claims 5, 12, 18, 24 and 28 define patentable subject matter for at least similar reasons. That is, independent claim 5 (and similarly independent claims 12, 18, 24 and 28) recites dividing a video stream into a plurality of sections, and synthesizing one of a key frame and a key region representing content of each section into one image, to generate a synthetic key frame. For similar reasons as set forth above, Hirai does not teach or suggest synthesizing key frames or key regions into one image to generate a synthetic key frame.

The Office Action also relies on Ratakonda to reject independent claim 28. However, Ratakonda merely relates to generating a hierarchical summary based on key frames of the video sequence. Ratakonda does not teach or suggest synthesizing key frames or key regions into one image so as to generate a synthetic key frame. As such, Ratakonda, either alone or in

combination with Hirai, does not teach or suggest all the features of independent claim 28, namely dividing a video stream into a plurality of sections, and synthesizing one of a key frame and a key region representing content of each section into one image, to generate a synthetic key frame.

Claims 2-4, 30 and 31 depend from claim 1, claims 6-11, 32 and 33 depend from claim 5, claims 13-17, 34 and 35 depend from claim 12, claims 19-23, 36 and 37 depend from claim 18, claims 25-27, 38 and 39 depend from claim 24, and claims 29, 40 and 41 depend from claim 28, and therefore define patentable subject matter at least for this reason. In addition, the dependent claims also recite features that further and independently distinguish over the applied references. For example, dependent claim 30 (and similarly dependent claims 32, 34, 36 and 38 and 40) recites that the synthetic key frame includes one of a selected key frame and a selected key region from each of the plurality of sections. Hirai and Ratakonda do not teach or suggest the synthetic key frame including key frame/key regions from each of the plurality of sections. As such, dependent claims 30, 32, 34, 36 and 38 define patentable subject matter at least for this additional reason.

In addition, dependent claim 31 (and similarly dependent claims 33, 35, 37, 39 and 41) recites that each of the plurality of sections comprises a video frame, and the selected one of the key frame and the key region comprises a portion of the video frame. Hirai and Ratakonda do not teach or suggest these features as they do not relate to the key frame and key region being a portion of a video frame. Thus, dependent claims 31, 33, 35, 37, 39 and 41 define patentable subject matter for at least this additional reason.


In view of the foregoing, each of claims 1-41 defines patentable subject matter.
Withdrawal of the outstanding rejections are respectfully requested.

CONCLUSION

In view of the foregoing amendments and remarks, it is respectfully submitted that the application is in condition for allowance. Favorable consideration and prompt allowance of claims 1-41 are earnestly solicited. If the Examiner believes that any additional changes would place the application in better condition for allowance, the Examiner is invited to contact the undersigned attorney, **David C. Oren**, at the telephone number listed below.

To the extent necessary, a petition for an extension of time under 37 C.F.R. 1.136 is hereby made. Please charge any shortage in fees due in connection with the filing of this, concurrent and future replies, including extension of time fees, to Deposit Account 16-0607 and please credit any excess fees to such deposit account.

Respectfully submitted,
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